

# SUBSTITUTE DECLARATION FOR PATENT APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name;

I believe I am the original, first and sole inventor (if only one name is listed below), or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

"Injectible Polysaccharide-Cell Compositions"

the specification of which (check one)

\_\_\_\_\_ is attached hereto

X was filed on April 30, 1993

as application Serial No. 08/056,140

\_\_\_\_\_ and was amended on: \_\_\_\_\_

(if applicable)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, § 1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, § 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s)	Priority Claimed
_____ (Number)	_____ (Country)
_____ (Number)	_____ (Country)
_____ (Number)	_____ (Country)

\_\_\_\_\_  
(Day/Month/Year Filed)

\_\_\_\_\_  
(Day/Month/Year Filed)

\_\_\_\_\_  
(Day/Month/Year Filed)

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of the application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

\_\_\_\_\_  
(Application Serial No.)

\_\_\_\_\_  
(Filing Date)

\_\_\_\_\_  
Status  
(patented, pending, abandoned)

\_\_\_\_\_  
(Application Serial No.)

\_\_\_\_\_  
(Filing Date)

\_\_\_\_\_  
Status  
(patented, pending, abandoned)

(patented, pending, abandoned)

As named inventor, I hereby appoint the following attorney(s) and agent to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

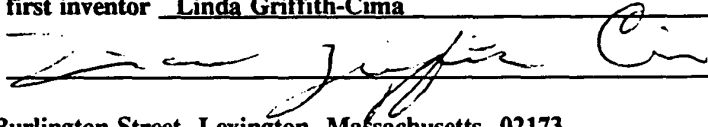
John S. Pratt	29,476
James L. Ewing, IV	30,630
Patrea L. Pabst	31,284
Jamie L. Greene	32,467
Cheryl K. Zalesky	33,052
Dean W. Russell	33,452
Claudia R. Adkison	36,979
Charles T. Simmons	35,359
David W. Bradin	P37,783

Send Correspondence to: Patrea L. Pabst, Esq.  
Kilpatrick & Cody  
1100 Peachtree Street, Suite 2800  
Atlanta, Georgia 30309-4530

Direct telephone calls to: Patrea L. Pabst (404)815-6508, or  
John S. Pratt (404)815-6367

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inventor Linda Griffith-Cima

Inventor's signature 

Date 2/28/94

Residence 28 Burlington Street, Lexington, Massachusetts 02173

Citizenship United States

Post Office Address Same as above

Full name of second joint inventor (if any) Anthony Atala

Inventor's signature \_\_\_\_\_

Date \_\_\_\_\_

Residence 14 LaGrange Street, Newton, Massachusetts 02167

Citizenship United States

Post Office Address Same as above

(patented, pending, abandoned)

As named inventor, I hereby appoint the following attorney(s) and agent to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

John S. Pratt	29,476
James L. Ewing, IV	30,630
Patrea L. Pabst	31,284
Jamie L. Greene	32,467
Cheryl K. Zalesky	33,052
Dean W. Russell	33,452
Claudia R. Adkison	36,979
Charles T. Simmons	35,359
David W. Bradin	P37,783

Send Correspondence to: Patrea L. Pabst, Esq.  
Kilpatrick & Cody  
1100 Peachtree Street, Suite 2800  
Atlanta, Georgia 30309-4530

Direct telephone calls to: Patrea L. Pabst (404)815-6508, or  
John S. Pratt (404)815-6367

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inventor Linda Griffith-Cima

Inventor's signature \_\_\_\_\_ Date \_\_\_\_\_

Residence 28 Burlington Street, Lexington, Massachusetts 02173

Citizenship United States

Post Office Address Same as above

Full name of second joint inventor (if any) Anthony Atala

Inventor's signature Anthony Atala Date 2-18-94

Residence 68 Pine St, Weston, Massachusetts 02193

Citizenship United States

Post Office Address Same as above

Full name of sole or first inventor Charles A. Vacanti

Inventor's signature Charles C. Valente Date 2/23/94

**Date** 2/23/94

**Residence** 5 Bushnell Drive, Lexington, Massachusetts 02173

**Citizenship** United States

Post Office Address Same as above

**Full name of second joint inventor (if any)** Keith T. Paige

**Inventor's signature** \_\_\_\_\_ **Date** \_\_\_\_\_

**Date** \_\_\_\_\_

**Residence** 37 Perry Street, No. 1, Brookline, Massachusetts 02146

**Citizenship** United States

**Post Office Address** Same as above

[illegible]

**DECLARATION FOR PATENT APPLICATION**

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name;

I believe I am the original, first and sole inventor (if only one name is listed below), or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**INJECTABLE POLYSACCHARIDE-CELL COMPOSITIONS**

the specification of which (check one)

\_\_\_\_\_ is attached hereto

X was filed on April 30, 1993  
as application Serial No. \_\_\_\_\_

\_\_\_\_\_ and was amended on: \_\_\_\_\_  
(if applicable)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, § 1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, § 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s)			Priority Claimed
_____ (Number)	_____ (Country)	_____ (Day/Month/Year Filed)	_____
_____ (Number)	_____ (Country)	_____ (Day/Month/Year Filed)	_____
_____ (Number)	_____ (Country)	_____ (Day/Month/Year Filed)	_____

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of the application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

_____ (Application Serial No.)	_____ (Filing Date)	_____ Status (patented, pending, abandoned)
_____ (Application Serial No.)	_____ (Filing Date)	_____ Status (patented, pending, abandoned)

"Injectable Polysaccharide Cell Compositions"

By: Keith T. Paige et

Filed: April 30, 1988

**DECLARATION**

As named inventor, I hereby appoint the following attorney(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

John S. Pratt	29,476
James L. Ewing, IV	30,630
Patrea L. Pabst	31,284
Jamie L. Greene	32,467
Cheryl K. Zalesky	33,052
Dean W. Russell	33,452
Claudia R. Adkison	33,979
Charles T. Simmons	35,359

Send Correspondence to: Patrea L. Pabst, Esq.  
Kilpatrick & Cody  
1100 Peachtree Street, Suite 2800  
Atlanta, Georgia 30309-4530

Direct telephone calls to: Patrea L. Pabst (404)815-6508, or  
John S. Pratt (404)815-6367

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inventor Keith T. Paige

Inventor's signature \_\_\_\_\_ Date \_\_\_\_\_

Residence 37 Perry Street, No. 1, Brookline, Massachusetts 02146

Citizenship United States

Post Office Address Same as above

Full name of second joint inventor (if any) Joseph P. Vacanti

Inventor's signature \_\_\_\_\_ Date \_\_\_\_\_

Residence 14 Woodside Road, Winchester, Massachusetts 01890

Citizenship United States

Post Office Address Same as above

Full name of sole or first inventor Charles A. Vacanti

Inventor's signature \_\_\_\_\_ Date \_\_\_\_\_

Residence 5 Bushnell Drive, Lexington, Massachusetts 02173

Citizenship United States

Post Office Address Same as above

Full name of second joint inventor (if any) Keith T. Paige

Inventor's signature *Keith T. Paige* Date 2/24/94

Residence 37 Perry Street, No. 1, Brookline, Massachusetts 02146

Citizenship United States

Post Office Address Same as above



**UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office**

ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

DATE: 08/25/93

TO:

N06C

PATREA L. PABST, ESQ.  
KILPATRICK & CODY  
SUITE 2800, 1100 PEACHTREE ST.  
ATLANTA, GA 30309

**UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT**

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT BRANCH OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE U.S. PATENT AND TRADEMARK OFFICE ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT ASSIGNMENT PROCESSING SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT BRANCH, NORTH TOWER BUILDING, SUITE 10C35, WASHINGTON, D.C. 20231

ASSIGNOR:  
PAIGE, KEITH T.

DOC DATE: 06/17/93

ASSIGNOR:  
VACANTI, JOSEPH P.

DOC DATE: 06/17/93

RECORDATION DATE: 07/06/93      NUMBER OF PAGES 003      REEL/FRAME 6626/0675

DIGEST : ASSIGNMENT OF ASSIGNORS INTEREST

ASSIGNEE:  
CHILDREN'S MEDICAL CENTER CORPORATION  
55 SHATTUCK STREET  
BOSTON, MA 02115

SERIAL NUMBER      8-056140      FILING DATE      04/30/93  
PATENT NUMBER           ISSUE DATE      00/00/00

*Flora Keff*  
EXAMINER/PARALEGAL  
ASSIGNMENT BRANCH  
ASSIGNMENT/CERTIFICATION SERVICES DIVISION

Entered Computer 9/20/93

703254



**ASSIGNMENT**

We, Keith T. Paige of 37 Perry Street, No. 1, Brookline, Massachusetts 02146 and Joseph P. Vacanti of 14 Woodside Road, Winchester, Massachusetts 01890, in consideration of Five Dollars and other valuable consideration paid to me by Children's Medical Center Corporation, a corporation of the Commonwealth of Massachusetts, having its principal place of business at 55 Shattuck Street, Boston, Massachusetts 02115, the receipt of which is hereby acknowledged, do hereby sell, assign and transfer unto said Children's Medical Center Corporation, its successors and assigns, the entire interest for the United States of America and all foreign countries including all rights of priority under the International Convention for the Protection of Industrial Property in a certain invention or improvement in "Injectable Polysaccharide-Cell Compositions" described in an application filed April 30, 1993, in the United States Patent and Trademark Office, and in all Letters Patent of the United States and all foreign countries which may or shall be granted on said invention, or any parts thereof, or on said application, or any divisional, continuing, reissue or other applications based in whole or in part thereon. And we agree, for ourselves and our executors and administrators, with said corporation and its successors and assigns but at its or their expense or charges, hereafter to execute all applications, amended specifications, deeds or other instruments, and to do all acts necessary or proper to secure the grant of Letters Patent in the United States and in all other countries to said corporation, with specifications and claims in such form as shall be approved by the counsel of said corporation and to vest and confirm in said corporation, its successors and assigns, the legal title to all such patents.

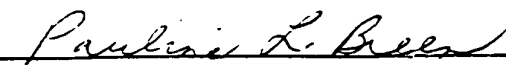
And we do hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said corporation, its successors and assigns.

WITNESS my hand and seal this 17<sup>th</sup> day of June, 1993.

  
Keith T. Paige

State of Massachusetts)  
County of Suffolk)<sup>SS.</sup>

Then personally appeared the above named Keith T. Paige and acknowledged the foregoing instrument to be his free act and deed, before me, this 17<sup>th</sup> day of June, 1993.

  
Notary Public

(commission expires 4/96)

REEL 6626 FRAME 676

"Injectable Polysaccharide-C 11 Compositions"  
Filed: April 30, 1993  
ASSIGNMENT

WITNESS my hand and seal this 17<sup>th</sup> day of June, 1993.

Joseph P. Vacanti  
Joseph P. Vacanti

State of Massachusetts)  
County of Suffolk)<sup>ss.</sup>

Then personally appeared the above named Joseph P. Vacanti and  
acknowledged the foregoing instrument to be his free act and deed, before me, this 17<sup>th</sup>  
day of June, 1993.

Pauline L. Green  
Notary Public  
Commission expires 4/96

JUL -6 93

PATENT AND TRADEMARK  
OFFICE

REEL 6625 FRAME 677



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

DATE: 04/21/94  
TO:

N07A

PATREA L. PABST, ESQ.  
SUITE 2800  
1100 PEACHTREE STREET  
ATLANTA, GA 30309-4530

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT BRANCH OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE U.S. PATENT AND TRADEMARK OFFICE ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT ASSIGNMENT PROCESSING SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT BRANCH, NORTH TOWER BUILDING, SUITE 10C35, WASHINGTON, D.C. 20231

ASSIGNOR:  
ATALA, ANTHONY

DOC DATE: 02/23/94

ASSIGNOR:  
VACANTI, CHARLES A.

DOC DATE: 02/23/94

RECORDATION DATE: 03/21/94 NUMBER OF PAGES 004 REEL/FRAME 6909/0292

DIGEST : ASSIGNMENT OF ASSIGNORS INTEREST

ASSIGNEE:  
CHILDREN'S MEDICAL CENTER CORPORATION  
55 SHATTUCK STREET  
BOSTON, MASSACHUSETTS 02115

SERIAL NUMBER 8-056140 FILING DATE 04/30/93  
PATENT NUMBER ISSUE DATE 00/00/00

EXAMINER/PARALEGAL  
ASSIGNMENT BRANCH  
ASSIGNMENT/CERTIFICATION SERVICES DIVISION

RECEIVED

MAY 11 1994

ALPATRICK & ODDY

Entered Computer 5/12/94

903254

ASSIGNMENT

We, Anthony Atala of 14 LaGrange Street, Newton, Massachusetts 02167, and Charles A. Vacanti of 5 Bushnell Drive, Lexington, Massachusetts 02173, in consideration of Five Dollars and other valuable consideration paid to us by Children's Medical Center Corporation, a corporation of the Commonwealth of Massachusetts having its principal place of business at 55 Shattuck Street, Boston, Massachusetts 02115, the receipt of which is hereby acknowledged, do hereby sell, assign and transfer unto said Children's Medical Center Corporation, its successors and assigns, the entire interest for the United States of America and its territories and all foreign countries and jurisdictions including all rights of priority under the International Convention for the Protection of Industrial Property in a certain invention or improvement in "INJECTABLE POLYSACCHARIDE-CELL COMPOSITIONS" described in U.S.S.N. 08/056,140 filed April 30, 1993 by Keith T. Paige and Joseph P. Vacanti in the United States Patent and Trademark Office, in the United States Patent and Trademark Office, and in all Letters Patent of the United States and its territories and all foreign countries and jurisdictions which may or shall be granted on said invention, or any parts thereof, or on said application, or any divisional, continuation, continuation-in-part, renewals, reissue or other applications based in whole or in part thereon. And we agree, for ourselves and our executors and administrators, with said corporation and its successors and assigns but at its or their expense or charges, hereafter to execute all applications, amended specifications, deeds or other instruments, and to do all acts necessary or proper to secure the grant of Letters Patent in the United States and in all other countries to said corporation, with specifications and claims in such form as shall be approved by the counsel of said corporation and to vest and confirm in said corporation, its successors and assigns, the legal title to all such patents.

And we do hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue such Letters

RECEIVED "S" 10/10/93

RECEIVED "S" 10/10/93

Inventor: Keith T. Paige, et al.  
U.S.S.N. 08/056,140  
Title: INJECTABLE POLYSACCHARIDE-CELL COMPOSITIONS  
ASSIGNMENT

Patent as shall be granted upon said application or applications based thereon to said corporation, its successors and assigns.

WITNESS my hand and seal this 23<sup>rd</sup> day of Feb 1994,  
1994.

Anthony Atala  
Anthony Atala

Commonwealth of Massachusetts )  
County of ) ss.

Then personally appeared the above named Anthony Atala and acknowledged the foregoing instrument to be his free act and deed, before me, this 23<sup>rd</sup> day of February, 1994.

Michael J. Milligan  
Notary Public My Commission 2/21/96

WITNESS my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_,  
1994.

Charles A. Vacanti  
Charles A. Vacanti

Commonwealth of Massachusetts )  
County of ) ss.

Then personally appeared the above named Charles A. Vacanti and acknowledged the foregoing instrument to be his free act and deed, before me, this \_\_\_\_\_ day of \_\_\_\_\_, 1994.

Notary Public  
Notary Public



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

DATE: 04/18/94  
TO:

N07A

PATREA L. PABST, ESQ.  
SUITE 2800  
1100 PEACHTREE STREET  
ATLANTA, GA 30309-4530

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT BRANCH OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE U.S. PATENT AND TRADEMARK OFFICE ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT ASSIGNMENT PROCESSING SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT BRANCH, NORTH TOWER BUILDING, SUITE 10C35, WASHINGTON, D.C. 20231

ASSIGNOR:  
CIMA, LINDA GRIFFITH

DOC DATE: 02/28/94

RECORDATION DATE: 03/21/94 NUMBER OF PAGES 005 REEL/FRAME 6909/0296

DIGEST : ASSIGNMENT OF ASSIGNORS INTEREST

ASSIGNEE:  
MASSACHUSETTS INSTITUTE OF TECHNOLOGY  
77 MASSACHUSETTS AVENUE  
CAMBRIDGE, MASSACHUSETTS 02139

SERIAL NUMBER 8-056140 FILING DATE 04/30/93  
PATENT NUMBER ISSUE DATE 00/00/00

*Larry Marshall*  
EXAMINER/PARALEGAL  
ASSIGNMENT BRANCH  
ASSIGNMENT/CERTIFICATION SERVICES DIVISION

RECEIVED  
MAY 11 1994  
KILPATRICK & CODY

Entered Computer 5/12/94  
P03254

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423	2424	2425	2426	2427	2428	2429	2430	2431	2432	2
--	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	---

cel. in. pane?

And I do hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue such Letters Patent as shall be granted upon said application or

Inventor: Keith T. Paige, et al.  
U.S.S.N. 08/056,140  
ASSIGNMENT

applications based thereon to said corporation, its successors  
and assigns.

WITNESS my hand and seal this 28 day of February,  
1994.

Linda Griffith Cima  
LINDA GRIFFITH CIMA

Commonwealth of Massachusetts )  
County of Middlesex ) ss.

Then personally appeared the above named Linda Griffith  
Cima and acknowledged the foregoing instrument to be free act and  
deed, before me, this 28th day of February, 1994

Keith T. Paige  
Notary Public

NOTARY PUBLIC  
MY COMMISSION EXPIRES 12.22.1997



Inventor: Keith T. Paige, et al.  
U.S.S.N. 08/056,140  
Title: INJECTABLE POLYSACCHARIDE-CELL COMPOSITIONS  
ASSIGNMENT

Patent as shall be granted upon said application or applications based thereon to said corporation, its successors and assigns.

WITNESS my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 1994.

\_\_\_\_\_  
Anthony Atala

Commonwealth of Massachusetts )  
County of \_\_\_\_\_ ) ss.

Then personally appeared the above named Anthony Atala and acknowledged the foregoing instrument to be his free act and deed, before me, this 23<sup>rd</sup> day of February, 1994.

Notary Public  
*Comm exp 9-4-98*

WITNESS my hand and seal this 23<sup>rd</sup> day of February, 1994.

Charles A. Vacanti  
Charles A. Vacanti

Commonwealth of Massachusetts )  
County of Suffolk ) ss.

Then personally appeared the above named Charles A. Vacanti and acknowledged the foregoing instrument to be his free act and deed, before me, this 23<sup>rd</sup> day of February, 1994.

Notary Public  
*Comm exp 9-4-98*

RECORDED  
MAR 21 94  
NOTARY PUBLIC OFFICE